China & Green GDP

Posted by Alexander Kirykowicz on February 03, 2010
China

Environmentally friendly in Chengdu, China (image by: preetamrai)

Back in the mid-2000s China began to experiment with the notion of Green GDP as a new way of accounting for its growth in an environmental context. This was touched on in a previous blog post, but I thought a more in depth look into exactly what Green GDP showed and why it failed would provide some insight.

The Green GDP for 2004 was published in September 2006 which calculated the loss for the year at 511 billion yuan ($66 billion) or 3.05% of growth. Within that figure it was calculated that water (286 billion yuan) and air (216 billion yuan) pollution were the most significant costs, followed by solid wastes and pollution accidents at 5 billion yuan.

On its publication SEPA director Pan Yue announced that “This marks only the beginning of our efforts in a Green GDP calculation”. But of course it was the first and only year that Green GDP was calculated, its results of near zero (or worse) growth in many areas considered too politically damaging by China’s authorities.

However, the expectation at the time from many such as the World Bank was that Green GDP accounting would show a loss of GDP of between 8-12%, far higher than the actual estimate. Much of this larger estimate owed to large water shortages, air and water pollution, desertification and ecological losses.

And indeed, the SEPA admitted it was a conservative estimate, as it only included environmental pollution costs (such as healthcare for air pollution – direct and relatively easy to measure). A more accurate estimate would also have included not only the costs of environmental pollution but the ecological damage done and the costs of natural resource depletion as well. As a result problems such as soil contamination, desertification, depletion of fish stocks and wildlife etc. had all been excluded from the estimate. Further accounting issues meant that even those items included in the measure were often underestimated or not fully included due to what was described as issues with "localization of departments, limits of technologies, and the limitation of basic data".

The estimation of Green GDP also suffered further challenges. Such practices are relatively few and far between and most countries have declined to attempt to make them. Any true measure of Green GDP would have to make estimates of goods such as forests which have no obvious market value. Compounding statistical issues is the nature of the Chinese political system. While some regions certainly stood to benefit from the calculation, seeing in it an opportunity to demand greater subsidies from the central government as their environment has been depleted. However, many more local officials objected to the scrutiny that Green GDP would put on them and as a result of pressure they placed on the central government the detailed regional breakdowns were not published.

Future Green GDP results were to attempt to correct for some of these deficiencies and as such it is perhaps not so surprising that the authorities ultimately decided to kill the project before more accurate, and more politically damaging estimates could be made of the true extent of environmental damage in China.

The elimination of Green GDP was a significant step back for the Chinese government's attempt at environmental preservation and it exposes wider issues facing China's attempts to repair its environment. One such issue is that any attempt to set targets or evaluate local official performance within the context of the environment is bound to meet strong resistance. At the same time, any attempt to do so is likely to be met with the challenge of insufficient data, issues of computing value and the statistical manipulation that China is notorious for.

What has been made apparent however, is that even with the very low estimates of the Green GDP report, Chinese are at best experiencing a modest improvement in their overall welfare and at the worst may, despite rising GDP, be seeing a fall in their welfare over time. While Green GDP was unpalatable to many Chinese officials, it does suggest that China's current growth strategy may actually be doing more harm than good today and in the future.

That said, studies (and here for some results from the Index of Sustainable Welfare) into the developed world's environmental track record (and other factors), pioneered by William Nordhaus and James Tobin in their 1973 paper, suggest that our own welfare may not be doing so much better when we factor in issues such as the environment into calculations of our GDP. While these measures are in themselves contentious and do not solely focus on the environment – the basic point is the same and as such, perhaps China's reluctance to use Green GDP shouldn't come as too much of a surprise.

http://www.climaticoanalysis.org/post/china-green-gdp/